

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON GROUNDFISH METHODOLOGY REVIEW - FINAL TOPIC SELECTION

The Scientific and Statistical Committee (SSC) reviewed two proposals for new methodologies to inform groundfish assessments and management, and discussed the possibility of revised steepness, biomass target and/or the proxy maximum sustainable yield (MSY) spawning potential ratio (SPR) for elasmobranchs.

Combined visual-hydroacoustic survey of Oregon's nearshore semi-pelagic black, blue and deacon rockfish

Dr. Leif Rasmuson (Oregon Department of Fish and Wildlife) provided an overview of the proposed methodology, including the technology for conducting the acoustic and visual survey components, the design for a survey off Oregon in 2020, and the analytical methodology used to provide estimates of abundance. The methodology involves combining camera drops to assess length and species composition with estimates of acoustic backscatter from acoustic transects. The need for estimates of fishery-independent abundance has been identified in the assessments for black and blue/deacon rockfish. Two years of pilot survey data are already available, as well as the results from several hundred camera drops. A full survey was conducted at Seal Rock in 2017, with acoustic results compared to those from pit tagging.

A survey covering the entire Oregon coast is planned for spring 2020, which will allow a methodology review to take place in fall 2020. The SSC endorses conducting a methodology review for this survey, noting that the Committee of Independent Experts reviewers should include someone with expertise in acoustics.

Data-moderate approaches that are highly reliant on length data

Dr. Jim Hastie outlined plans for development of data-moderate stock assessment methods which primarily use length data for parameter estimation. There are no such approved methods even though there are several rockfish stocks (particularly those in the nearshore) that have limited index data but some length data, which could potentially be assessed using methods such as the Length-based Integrated Mixed Effects (LIME) assessment method or a simple implementation of Stock Synthesis (SSS). Use of such methods should reduce time for model development and review.

The SSC endorses conducting a methodology review for LIME and SSS. The review should take place before March 2020, to allow time to revise the Terms of Reference for stock assessments in time for the 2021 assessment cycle. The review could take place in conjunction with the workshop on data-poor methods.

Reference points for elasmobranchs

The current SPR target for elasmobranchs (0.5) is not consistent with the steepness value (0.4) and the biomass target of $B_{40\%}$, assumed in the assessments for longnose and big skate (Agenda Item H.5.a, Supplementary SSC Report 1). A meta-analysis of productivity estimates for elasmobranchs should be conducted to enable the current steepness value, SPR proxy for F_{MSY} and/or biomass target to be revised. The Northwest Fisheries Science Center may conduct this meta-analysis, with the possibility of a review in summer 2020.